Vindication of Hieronymus Cardanus

By Gotthold Ephraim Lessing (1754)

Readers who know Cardano, and who credit me with knowing him as well, will already foresee that my vindication will not concern the whole of Cardano. This extraordinary genius has left all posterity in doubt concerning himself. One must either believe that the greatest intellect is most essentially linked with the greatest folly, or his character remains an insoluble riddle. What have people not made of him; or rather, what has he not made of himself in a work—the likes of which I could wish every great man might write with equal candour! (*De vita propria* [On His Own Life]).

It would be a wonder if so rare a mind had escaped the suspicion of atheism. Has anything more often been required to bring it upon oneself than to think for oneself and to set one's face against approved prejudices? Seldom has there been any need to combine with it, as Cardano did, genuinely offensive propositions and a problematic life.

A blatant slander, which people do not cease to transfer from one book into another, impels me to speak somewhat of this suspicion. It is grounded, as is well known, upon three points: upon a book which he is said to have written against the immortality of the soul; upon his astrological absurdity of drawing the nativity of the Saviour; and finally upon a certain passage in his work *De subtilitate* [On Subtlety].

Of the first two grounds I shall say nothing, because others have already said all too much concerning them. The first is at once refuted by that "is said". He *is said* to have written such a book, which he indeed did not have printed, but yet secretly showed to his friends. And who then is the guarantor of this assertion? None other than Martinus del Rio (*Disput. Magic.*, Vol. I, Book II). If one is still willing to believe it, one must not know this Spaniard. The second ground is destroyed by Cardano's own words, which Pastor Brucker in particular cited from his rare work on Ptolemy's four books *De astrorum judiciis* (*Hist. Crit. Phil.*, Vol. IV, Part Two, p. 76).

I shall not delay over these, as I said; I turn rather at once to the last point, because I

hope indeed to note something particular regarding it. It may be regarded as a good addition to the article which Bayle made on this scholar in his critical dictionary.

It is proper that one hear Cardano's accusers first. They are so many that I shall be able to let only one speak for them. This may be a writer still living, whose book in its kind has become a handbook for the learned, Pastor Vogt, or rather de la Monnoye through him. In his catalogue of rare books he cites the first and another edition of Cardano's work *De subtilitate*, and what he notes there is the following:

"One reads," says he, "in these uncommonly rare editions a very impious and scandalous passage, which was omitted in later printings. I will recount the whole matter in the words of the learned de la Monnoye, in Vol. 4 of the *Menagiana*, p. 305: 'Cardano fares even worse than Pomponazzi,' says he. 'In the eleventh of his books *De subtilitate* he compares the four chief religions briefly with one another; and after he has set one to contend against another, he concludes, without declaring for any one, with these rash words: *igitur his arbitrio victoriae relictis* [therefore, these being left to the decision of victory]. That is to say, in plain German, he would leave to chance which side victory will turn to. These words he indeed altered himself in the second edition; yet nevertheless three years later he was very bitterly punished for them by Scaliger (*Exercit.* 258, no. 1), because their sense is very terrible and clearly proves Cardano's indifference with regard to the victory which one of the four religions, whichever it may be, might carry off either by the strength of proofs or by the force of arms.'"

From this account it appears that Scaliger was the first to whom the passage of which I speak gave offence. But one must not believe that from him down to de la Monnoye it was censured by no other. Marinus Mersennus rose up against it in his exposition of the first book of Moses (p. 1830) and held it for nothing less disgraceful than an epitome of the notorious book *On the Three Impostors*. From Mersennus it was afterwards made known to bibliophiles especially by Morhof (*Polyh.*, Vol. I, Book I, c. 8, § 6), and these have faithfully delivered it from one hand into another. Reimann (*Hist. univers. Atheismi et Atheorum*, p. 365 & 547), the Halle authors of the *Observat. selectarum* (Vol. X, p. 219), Freytag (*Analect. litteraria*, p. 210), the Library of Salthenius (p. 272) all say the very same thing. All call the cited passage *locum impium et scandalosissimum, locum offensionis plenissimum* [an impious and utterly scandalous passage, full of offence]. To these I

must add a friend of mine, namely Adjunct Schwarz in Wittenberg, who in his first exercise *In utrumque Samaritanorum Pentateuchum* incidentally touched this same string.

What, however, will be thought of me if I boldly assert that all these learned men are either mere parrots or, if they have seen with their own eyes, were unable to construct the sense? I say: *unable*; for one cannot do even that which prejudices prevent us from doing.

For my part, I have the just-mentioned Adjunct Schwarz to thank that I need not blow in the common horn. In his possession I obtained the very first edition of Cardano's work *De subtilitate* and turned through it with all the greater eagerness, since that same copy had belonged to Philip Melanchthon, in whose own hand a few small notes were to be read here and there. I was sorry that I could not convince the present owner of the correctness of my observation.

I will delay no longer to present it to the reader, but first mention only a few words concerning the first edition itself. From certain trifles I conclude that Herr Vogt did not see it himself. Let one but compare the following title with his:

HIERONYMI CARDANI, *Medici Mediolanensis, de subtilitate Libri XXI ad illustr. Principem Ferrandum Gonzagam, Mediolanensis Provinciae praefectum.* [On Subtlety, 21 Books by Hieronymus Cardano to the illustrious Prince Ferdinand Gonzaga, Governor of the Province of Milan]. After this title follows on the title-page itself a brief address of the printer to the reader, in which he praises the excellence of the book to him. Here it is: *Joh. Petrejus Lectori: Habes hoc in libro, candide Lector, plus quam sesquimille variarum non vulgarium, sed difficilium, occultarum et pulcherrimarum rerum causas, vires et proprietates, ab authore hinc inde experimento observatas: quae non solum propter cognitionem delectabiles, sed etiam ad varios usus, tum privatos tum publicos, multo utiliores quam hactenus plurimorum scripta, quae etsi ex philosophia sint, minoris tamen momenti esse, legens haec et illa, haud mecum dissenties; uti singula in adjecto indice perspicue licet cernere.* [Johann Petrejus to the Reader: In this work you have, gentle reader, more than fifteen hundred causes, powers, and properties of various, uncommon, but difficult, secret, and most beautiful things, observed here and there by the author through experiment, which are not only delightful for knowledge, but also far more useful for various private and public uses than the writings of most up to

now; for when you have read these and those, you will not disagree with me that those, even if they be of philosophy, are nevertheless of lesser weight; as may be clearly seen in the attached index.] Beneath this brief publisher's panegyric stands finally: *Norimbergae apud Jo. Petrejum, jam primo impressum, cum Privilegio Caes. atque Reg. ad Sexennium. Ao. MDL.* [Printed for the first time at Nuremberg by Johann Petrejus, with Imperial and Royal Privilege for six years, in the year 1550.] The format is folio, the thickness 373 leaves, without the index.

Now it will hopefully be credited to me that I shall cite the disputed passage directly from the original first edition.

But allow me not to do so in Latin. Cardano's Latin is so poor that the reader loses nothing by seeing it transformed into equally poor German. For must I not maintain the character of the expression in translation? Here it is then:

Passage from Book XI of Cardano's *De Subtilitate*

"Men have ever differed among themselves in language, customs, and laws as much as animals do from them. Among the followers of Muhammad, a Christian, and among both, a Jew is held in no higher esteem than the most rejected dog; he is mocked, persecuted, beaten, plundered, murdered, cast into slavery, abused through the most violent outrages, and tormented with the foulest tasks, so that he would not suffer so much from a tiger whose young had been stolen. Of laws, however, there are four: that of the idolaters, of the Jews, of the Christians, and of the Muhammadans.

"The idolater prefers his law for four reasons: First, because he has so often carried off the victory in wars against the Jews, until he finally succeeded in completely exterminating their laws; it must therefore please the supreme master-builder and ruler no more to have a single God worshipped than to have many gods worshipped. Next they say: Just as, when the people have a supreme ruler over them, it behoves everyone in private matters, and especially in small things, to have recourse rather to his commanders and courtiers than to trouble the king himself for every cause, so must one—since the supreme God concerns Himself very little with what takes place here on earth, whereof the affairs of private persons make up the smallest part—flee rather to the gods whom this supreme God has appointed as His servants in matters of no great weight, than burden with prayers for every worthless

cause Him whom no mortal can reach even in thought. Finally, they assert that by this law and by these examples, through holding out the hope of being worshipped as divine after this mortality, many were impelled to render themselves famous through virtues, as Hercules, Apollo, Jupiter, Mercury, Ceres. As for miracles, however, they could cite examples of the manifest help of their gods and oracles just as well as any others. Nor is our opinion concerning God and the origin of the world any less absurd, but rather even more absurd than theirs, as appears from the strife among the other laws and from their hatred toward all philosophers as the authors of truth. The latter, however, reproach them with human sacrifices, the worship of dead statues, and the multitude of gods, which are mocked even by their own people; likewise the shameful vices of these gods of theirs, which one would be ashamed to imagine even in a man, and the ungrateful oblivion of the supreme Creator.

"When these have thus been refuted in the said manner, the Jew stands up against the Christians: 'If fables are contained in our law,' says he, 'they have all come upon you as well, who accept our law. The unity of God no one has worshipped so unadulterated as we, and from us this truth takes its origin. Furthermore, no law can boast of such great miracles and signs, and no people of such nobility.' But hereupon the rest speak against this law: 'Everything that has perished must not have pleased God; they, the Jews, had raged against their prophets; their people had ever been an abomination to the whole world; and those who are worshipped by the Christians and Muhammadans, their own law commands them to worship.'

"After this law also has been overthrown, the Christian now contends against the Muhammadan. This strife is sharper and is supported on both sides with great forces, upon which the welfare of whole kingdoms and lands depends. The Christian relies especially upon four grounds: First, upon the testimony of the prophets, who foretold everything that came to pass with Christ so exactly that one would believe it was not predicted, but written down after all had already happened. These, however, report not the slightest thing of Muhammad. Secondly, upon the authority of Christ's miracles, which were of such greatness and nature that they bear no comparison with the miracles of the Muhammadans; as for example the raising of the dead, of Lazarus, of the maiden, and of the widow's son. The miracles of the Muhammadans, on the other hand—the falling of stones from black birds, or the concealment in the cave, as he teaches in his Koran, or that he

was sent or transported in one night from Mecca to Jerusalem, or his ascension into heaven, or his dividing of the moon—all these either cannot be confirmed by witnesses or are no miracles at all. That stones are cast down by birds is indeed something wondrous and may well have been so, but a miracle it is not; that the moon appears divided is neither a miracle nor anything wondrous. To be transported from Mecca to Jerusalem or to ascend into heaven would indeed be a miracle, but witnesses are lacking to him. The third ground is taken from the commandments of Christ, which contain nothing that conflicts with morality or natural philosophy. As for his life, no one can match him in it, were he even the best of men; but imitate it everyone can. What? *Can*, say I? Yea, as far as you depart from his example, so much impiety do you assume. Muhammad, on the contrary, counsels murder and war and the tower in paradise; but paradise he describes in such wise that therein one marries, is served by handsome youths, eats meat and apples, drinks nectar, lies upon silken beds, and possesses jewels and silken couches under the shade of trees. What sound intellect is not offended thereby? And how absurd is that pretence in the Koran, according to which angels and God are said to pray for Muhammad? Likewise the fiction that God ascends from earth to heaven, and that He Himself swears by the spirits, His servants. What shall one say of the story with the camel—if indeed it be a story and not rather a fable—which is repeated at least five times? Added to this, as the final ground for the Christians, is that our law was preached by very few inexperienced and poor people against so many emperors and rich priests of the idols, and that, although already weakened by internal divisions, it nevertheless took possession of the whole globe.

"Now, however, the Muhammadans also have five arguments for themselves: First they say, the Christians do not worship the unity of God so purely as they; the Christians give Him a Son, who is likewise God. 'When, however,' they continue, 'there are several gods, they will become embittered against one another, because it is an inevitable thing in a kingdom that it cannot be governed by many without jealousy. It is also an impious thing to associate with the most exalted God, the Creator of all things, one who is equal to Him, since He is the Most High, and to give Him a Son, since He needs none and is eternal. Above that, therefore,' say they, 'which the Christians attribute to Him, the heavens revolt, and the earth flees in horror. God is therefore introduced among them as though He complained, and Christ as though he excused himself, stating that he had not claimed this for himself, but that others had attributed it to him against his will.' The second argument

comes before Muhammad himself, who charges the Christians with worshipping images, and thus appearing to be worshippers of gods and not of one single God. Hereupon follows the third argument, which is taken from success, in that they have already won so many victories and conquered so many provinces that the Christian law could scarcely be called a part of the Muhammadan, were it not that through the foresight of our Emperor another world has already in part been instructed in the Christian religion. 'Is it not now probable,' say they, 'that God favors those who have a more correct faith? He could indeed save so many with the smallest help, if He had not turned away from them and willed their voluntary ruin.' As for their life and customs, these lend no small authority to their law, since in a completely inverted manner we seem to imitate Muhammad, and they Christ; they pray, they fast, they use a very simple, indeed the simplest dress, they abstain from murder, games of chance, adultery, and abominable blasphemies against God, with which four vices the nations of Christendom are almost completely inundated. And what shall one say when one considers the propriety of their women and the reverence of their temples? As for miracles, finally, they maintain that we have only narrated miracles, but they have present ones up to now. Some abstain for many days from food; others burn themselves with fire and lacerate themselves with iron without giving the slightest sign of pain. Many can speak through the belly, who were formerly called *engastrimuthi*; this, however, they can do especially when they celebrate certain orgies and turn around in a circle. Just as it is completely correct with these three points, since, as we reminded above, they proceed in a natural, though wondrous manner, so on the other hand it is a mere fiction that among them children are also born to women without intercourse. They even have their saints, who are famous for miraculous succor: Sedichasim for victory, Vanus for peace, Ascichus for the reconciliation of married couples, Mirtschinus for the preservation of cattle, Chidirelles for travelers, who, sitting on a dappled horse, is said to meet them and show them the right way. They also still preserve the shoes of him who was innocently condemned by a king and cast into a glowing oven, but who nevertheless, after the manner of the three men in the fiery furnace mentioned in Holy Scripture, came out unharmed. Well known, finally, is also the miracle of Mirathbeg, a Turkish ruler, whom the Latins call Amurath, whereby from a great and warlike king he became a priest and voluntarily enclosed himself in a monastery."

Thus far goes the dispute which Cardano lets the four religions carry on among

themselves. A few sentences of it still remain, which I will reserve for a few moments in order to make the vindication of my philosopher all the more striking. Allow me above all things to venture a few observations upon what has been read.

Why does one actually condemn this passage? Is the comparison of the different religions in and of itself punishable, or is it only the manner in which Cardano undertook it?

The first, one will hardly take it into one's head to maintain. What is more necessary than to be convinced of one's faith, and what is more impossible than conviction without preceding examination? Let it not be said that the examination of one's own religion is sufficient, that it is not necessary to seek the marks of divinity in others once one has discovered them in one's own. Let not the parable be used that, when one once knows the right way, one need not concern oneself with the wrong ways.

One learns not the latter through the former, but the former through the latter. And does one not, by praising this one-sided investigation, deprive oneself of the very hope that those of false faith may become our brothers through knowledge? If the Christian is commanded to examine only the doctrines of Christ, then the Muhammadan is also commanded to concern himself only with the doctrine of Muhammad. It is true, the former will not thereby run the danger of abandoning a better faith for a worse; but the latter will also have no opportunity to exchange the worse for a better. Yet what do I speak of danger? He must place a weak confidence in the eternal truths of the Savior who fears to hold them up against lies. Nothing can be truer than truth; and slander has no place where I see on the one side nothing but nonsense, and on the other nothing but reason. What follows from this? That the Christian can lose nothing in the comparison of religions, while the heathen, Jew, and Turk can gain infinitely much; that it is not only not to be forbidden, but even to be commended.

Cardano must therefore have erred in the manner of this comparison. We shall see. It could have happened in a twofold way: Either he presented the arguments of the false religions too strongly, or the arguments of the true too weakly. Did he do the latter?

I demand impartial readers; and these shall tell me whether any one of all the

innumerable theologians and philosophers who after Cardano have proved the truth of the Christian religion has set forth a single ground more, or the same grounds more strongly than he. More at length, perhaps, but not more strongly. It is known that the chief of these are the historical ones; and what kind of them is missed here? One can assume three kinds of them: historical grounds taken from the times before the incarnation of the Savior, historical grounds from the times of the Savior himself, and finally historical grounds from the times that followed him. The first are those provided to us by the prophets; the second are those resting upon the miracles of our Redeemer; and the third are drawn from the manner in which the Christian religion was spread. All these Cardano touched upon in few words, but very emphatic ones. What can one say more strongly of the predictions of the Jewish prophets than that they were so precisely fulfilled in Christ that one should sooner consider them narratives written after the event than what they are? Can their ambiguity be denied in more explicit words? I will not hope that anyone will go so far with unkind conjectures as to maintain that Cardano, by this very addition, wished to make them suspicious and indicate from afar what they were actually to be held for. No reasonable man can be so absurd who knows that even now a whole people maintains their unadulterated antiquity to its own refutation.

Of the miracles of Christ also our philosopher speaks very acutely, noting two things whereof one is always lacking in the miracles of false religions. He maintains that they are real miracles, and that as such they were confirmed by credible witnesses. He distinguishes them, therefore, from the deceptions of a learned impostor who sells the rare for the divine and the artificial for the wondrous to an ignorant populace. He distinguishes them further from the boastings of enthusiasts who claim to have done who knows what—only pity that no one saw it. Can one prove their credibility better, or can one prove it in any other way?

Finally, let one see also how thoroughly he speaks of the proof from the propagation of the Christian religion. He touches upon nothing save what really has conclusive power, omitting everything doubtful. He says: it was preached by poor people; it could not, therefore, have been accepted from selfish motives; and these poor people were moreover unlearned, consequently they were not superior in intellect to those whom they converted, and what they accomplished was to be ascribed to a higher power. He notes the resistance which naturally would have been insuperable to them, and notes something which I find noted by few: namely,

that our religion did not cease to subdue men even when it was torn and confused by internal sects. An important circumstance! A circumstance showing necessarily that there must be something in it which exerts its power at all times independent of all disputes. And what can this be other than the ever-victorious truth? Cardano omits nothing in this proof save that which I could wish had always been omitted: namely, the blood of the martyrs, which is a very ambiguous thing. He was without doubt all too well versed in their history not to notice very many among them who deserve to be called fools and madmen rather than witnesses in blood. He also knew the human heart too well not to know that a cherished whim can carry it just as far as truth in all its brilliance. In short, he is not only a strong defender of the Christian faith, but also a cautious one—two things that are not always found together.

Consider the rest! Cardano could have let it rest at the historical grounds; for who does not know that if these are but correct, all other difficulties must be forced under the yoke of faith? But he is too clever to demand this sacrifice of reason so directly. He maintains rather that the whole doctrine of Christ contains nothing that conflicts with morality and natural philosophy, or that cannot be brought into harmony with it: *nihil continent praecepta Christi a philosophia morali aut naturali absonum* [The precepts of Christ contain nothing discordant with moral or natural philosophy] are his own words. That is all that can be demanded! Let it not be said that he thereby went to another extreme and wished to deny our religion its peculiar truths, which reason by itself cannot arrive at. If this had been his opinion, he would have expressed himself quite differently; the doctrine of Christ, he would have had to say, contains nothing else than what morality and natural philosophy contain; but not: what it contains harmonizes with these. Two completely different propositions!

Especially does he press the excellence of Christian morality, saying clearly that Christ alone is the most perfect model of all virtues: *illius vitam aequare nemo, quamvis optimus, imitari autem quilibet potest. Quid potest? imo quantum ab illius exemplo abscedis, tantum nefarii moris induis* [As for his life, no one can match him in it, were he even the best of men; but imitate it everyone can. What? *Can*, say I? Yea, as far as you depart from his example, so much impiety do you assume. — Lessing]. Weigh these words, which I have perhaps rendered too weakly in translation! But tell me now finally whether one can say more good of our religion? Whoever demands more arguments betrays, in my judgment, a desire to accept

none at all; and whoever brings forward more betrays a wish to have many bad ones rather than few good ones. In a word, I hold this passage of Cardano to be the most thorough summary that can be made from all defenses of the Christian religion written before and after him.

The second case still remains. If Cardano did not weaken the arguments for the truth, he might nevertheless have given color and life to the lies, thereby making himself suspicious. This also deserves to be considered.

Above all things, therefore, I ask whether it is permissible, in investigating the truth, to make use of the opponent's ignorance? I well know that in civil disputes one is not required to furnish one's adversary with evidence against oneself, without which he would immediately lose his cause. Rather would one consider him a madman who did so, unless he were certain that he could refute each and every point in the most manifest manner. But why? Because his loss is necessarily bound up with the other's gain, and because one can demand nothing further of a judge than that he side with the party that appears to have the greatest right. This, however, is not found in disputes that have truth for their object. Men contend for it, to be sure; yet whichever side wins it, it never wins it for itself alone. The party that loses loses nothing but errors, and can at any moment share in the victory of the other. Sincerity is therefore the first thing I demand of a philosopher. He must suppress no proposition because it agrees less with his system than with another's, nor any objection because he cannot answer it with full force. If he does so, however, it is clear that he turns truth into a selfish business and wishes to enclose it within the narrow limits of his infallibility.

This observation presupposed, I should like to know how a serious charge can be made out of it if a philosopher sets even false religions and the most dangerous sophistries in the most advantageous light, so as to make his refutation not so much easy as certain? I should like to know what would follow, even if it were true that Cardano had supported the heathen, Jewish, and Turkish faiths with so many and strong grounds that even the finest minds among their own adherents could add nothing more? Would they for that reason remain any less false, or would our faith become any less true? Yet so far is Cardano from having done this, that to my great regret I must charge him with the very contrary.

I assert, then, that he acted sincerely with no single religion save the Christian; all

the rest he supported with the worst arguments, and refuted with even worse. One need only be without prejudice to agree with me in this. Of the heathen I will mention nothing, and of the Jewish only little. Against the latter, he lets the other three raise the objection that God could not have been pleased with that which He permitted to perish. Has it then perished, the Jewish religion? How if its present state were nothing but a prolonged Babylonian captivity? The arm that delivered its people then is still unweakened today. Perhaps the God of Abraham has permitted the difficulty of leading the descendants of that pious man back into their inheritance to multiply and become so insurmountable, only to manifest His power and wisdom in an all the more glorious luster, to the confusion of their oppressors.

"Mistake not, Cardano!" a faithful Israelite would without doubt have answered him; "our God has so little forsaken us that even in His judgments He remains our shield and protection. Were He not watching over us, should we not long since have been swallowed up by our enemies? Would they not long since have wiped us from the face of the earth and erased our name from the book of the living? Scattered into all corners of the world, everywhere oppressed, insulted, and persecuted, we are still the very same that we were a thousand and more years ago. Recognize His hand, or name to us a second people that opposes such insuperable strength to misery, and amid all afflictions worships the God from whom these afflictions come, worshipping Him still after the manner of their fathers, whom He covered with blessings! What this God said to Satan when He would test His man Job: *Behold, he is in thy hand; but spare his life!*—that very thing He spoke to our enemies: *My people be in your hand; but spare its life!* There are the bounds of your raging; there is the shore upon which the waves of your pride shall break! Hither and no further! Continue only to plague us; make no end of oppressions; you will not attain the end you seek. He has spoken a *Spare*; and what He speaks is true. In vain will Bildads and Zophars rise up from our own race and doubt our good cause; in vain will our own wives cry out to us: *Dost thou still retain thine integrity? Yea, bless God and die!* We will not bless Him; for at last He will descend in a whirlwind, turn our captivity, and give us twice as much as we had."

I will let my Israelite speak no further; let it be merely a sample of how easily he could refute Cardano's fallacies. And just as easily would the Muhammadan trap him, against whose faith he was even more unjust. Unjust I should perhaps not say, since ignorance was without doubt more to blame than ill will. The reports one had

in his time of Muhammad and his doctrines were very inadequate and mingled with a thousand lies, which Christian polemics accepted all the more willingly as truths the easier a game they obtained thereby. We received no sincere knowledge of them until the works of Reland and Sale, from which it has chiefly been recognized that Muhammad was no such senseless impostor, and his religion no mere web of ill-connected absurdities and falsifications. But for all that, Cardano is not excused; he, who concerned himself with so many unknown matters, might first have concerned himself with this before venturing a comparison that presupposes a full knowledge, if it is not to be unseemly in a philosopher. And what could he have replied if a Muselman, who need not even be the most learned, had engaged with him in the following manner:

"It is easily seen, my good Cardano, that you are a Christian, and that your purpose was not so much to compare the religions as to let the Christian triumph as easily as possible. At the very outset I am ill satisfied with you for putting the doctrines of our Muhammad into a class to which they do not belong at all. That which the heathen, the Jew, and the Christian call their religion is a jumble of propositions which a sound reason will never recognize as its own. They all appeal to higher revelations whose possibility is not even proved. Through these they claim to have received truths which might perhaps be truths in another possible world, but not in ours. They recognize it themselves and therefore call them mysteries, a word that carries its refutation directly with it. I will not name them to you, but only say that it is precisely these that produce the grossest and most sensual concepts of all that is divine; that it is these that will never allow the common people to think of their Creator in a worthy manner; that it is these that lead the mind astray into fruitless contemplations, forming a monster for it which you call faith. To this you give the keys of heaven and hell; and fortune enough for virtue that you barely make it a contingent companion thereof! The worship of holy phantoms makes one blessed among you without righteousness, but not the latter without the former. What blindness! Yet the Prophet himself succeeded only in part in opening your eyes, and should I undertake it?

"Cast a glance upon his law! What do you find therein that does not agree with the most rigorous reason? We believe in one single God; we believe in a future punishment and reward, one of which, according to the measure of our deeds, will surely overtake us. This we believe, or rather, that I may not use your desecrated

words, of this we are convinced, and of nothing else! Do you know, then, what devolves upon you if you will contend against us? You must prove the inadequacy of our doctrines! You must prove that man is bound to more than knowing God and being virtuous, or at least that reason, which was given him for that very purpose, cannot teach him both! Prate not of miracles if you would exalt Christianity above us! Muhammad never wished to perform the like; and had he any need to do so? Only he needs to perform miracles who has incomprehensible things to persuade men of, in order to make the one incomprehensible probable by the other. But not he who presents nothing save doctrines whose touchstone everyone carries within himself.

"When one rises up and says: 'I am the Son of God,' it is proper to cry out to him: 'Do something that such a one alone could do!' But when another says: 'There is but one God, and I am His prophet'—that is: I am he who feels himself destined to save His unity against you who misjudge Him—what miracles are needed there? Let not the peculiarity of our language, the boldness of our manner of thinking, which gladly encloses the smallest proposition in dazzling allegories, seduce you into taking everything literally, holding that for miracles over which we ourselves should be greatly astonished if they were indeed miracles. We gladly make you a present of these supernatural—I know not what to call them. We make you a present of them, I say, and thank our teacher that he did not wish to make his good cause suspicious thereby. Nor reproach us with the force of arms under whose protection Muhammad preached. It is true, he and his followers shed very much blood, and Christ and his apostles none at all. But do you believe that what would have been a cruelty among you is not so among us? Take heed, it will come to the same thing as before! When he who presents incomprehensible things—which I can believe at most only because I hold him for an honest man who will not deceive me—when he, I say, will force faith with the sword, he is the most abominable tyrant and a monster deserving the curse of the whole world. But when he who saves the honor of the Creator finds obstinate miscreants who will not even confess that whereof all nature bears witness, who will not even confess His unity, and exterminates them from the face of the earth which they desecrate, he is no tyrant; he is—if you will call him no prophet proclaiming peace—nothing but an avenging instrument of the Eternal.

"Or do you indeed believe that Muhammad and his successors demanded any other

confession from men than the confession of such truths without which they cannot boast of being men? Do you know what Abu Obeidah wrote to the people of Jerusalem when he besieged that holy place? We demand of you to testify that there is but one God and Muhammad is His apostle, and that there will be a day of judgment when God will raise the dead from their graves. When you render this testimony, it is not lawful for us to shed your blood or lay hands on your goods or children. If you will refuse this, consent to pay tribute and be subject to us; otherwise I will bring people against you to whom death is sweeter than wine and swine's flesh are to you. See, this summons went forth to all! Now speak: Did those deserve to live who would not even confess the unity of God and the future judgment? Stumble not at their being required also to declare Muhammad a messenger of God. This clause had to be added to see whether they would take the unity of God quite properly; for you also claim to accept it, but we know you! I will press you no further; but laugh I must at you at last. You believe that we understand the sensual representations of paradise literally. Tell me, if I have read your Koran aright, do you understand the description of your heavenly Jerusalem literally as well?"

Yet I think this is letting another speak long enough. I take the word back myself and say that, things being so constituted, it would not surprise me if the Muhammadans in particular, in case they ever came to know good Cardano, should count him among their most malicious slanderers; but that it surprises me greatly when Christians count him among theirs.

I have therefore still the last step to take.

"Well now," people will without doubt say, "let the passage itself be as innocent as it will; enough that Cardano, by an impious conclusion, has only too unhappily betrayed his innermost heart. The *Igitur his arbitrio victoriae relictis* [therefore, these being left to the decision of victory] is so terrible that surely no turns of phrase will suffice to turn it into anything better than a contempt for all things divine."

God forbid that I should wish to use turns of phrase! The passage must save itself, or I will be the one who inveighs most against it. Let one go back a moment, then, and see where I broke off above: "And voluntarily enclosed himself in a monastery," were the last words. Upon these now follow immediately the following, which for greater credibility I will cite in their own language: *Sed*

utinam tam facile esset, arma illorum superare, quam haec objecta diluere. Verum res ad arma traducta est, quibus plerumque major pars vincit meliorem. [But would to God, this means, that one could as easily overcome their arms as one can bring to naught these objections of theirs! But the matter has come to arms, wherein the stronger party for the most part overcomes the better.]

Now Cardano suddenly leaves this subject and turns to the differences observed among the regions of the earth. But the words he uses for the transition are the so often condemned words: *Igitur his arbitrio victoriae relictis, ad provinciarum discrimina transeamus.* [Therefore, these being left to the decision of victory, let us proceed to the differences of the provinces.]

If I were a man of exclamations, I should now exhaust myself entirely in them. I should give it to be understood with many an *O!* and *Ah!* that not even the very clearest thing is safe from unkind distortions. I should pity good Cardano; I should wish for all honest scholars that dear God might preserve them from envious men who would rather not know the rules of grammar than not slander. But I will do none of this, but merely set down the passage once more in its context: *Verum res ad arma traducta est, quibus plerumque major pars vincit meliorem. Igitur his arbitrio victoriae relictis, transeamus etc.* [However, the matter has come to arms, wherein the stronger party frequently overcomes the better. Therefore, these being left to the decision of victory, let us proceed, etc.]

O tell me, my Messrs. Scaliger, Mersenne, Morhof, de la Monnoye, Vogt, Salthenius, Freytag, Schwarz, to what does *his* [these] refer? Why should it refer to the contents of two preceding pages, and why not rather to *arma* [arms]? Why should it mean: "I will let it depend on good luck which of the four religions will maintain the preference"? And why not rather: "We must leave it to fortune whether the arms of the Muhammadans or the arms of the Christians will carry off the upper hand, not in their doctrines, but in battles"? Is both then one and the same? What have you to blame in the latter sense? Surely not that you cannot vent your pious gall upon it? If another were in my place, he would perhaps vent his upon you.

All this is so clear that I shall well beware of adding another word. It would seem as though I wished to contend with my readers themselves, who without doubt conceded the whole slander to me at the very first word.

But why, nevertheless, did Cardano alter these words afterwards? As if one altered only what one recognizes as wrong oneself; as if one did not often do it with the most innocent thing when one sees that opponents wish to suck poison from it!

Here it would perhaps not be useless to determine in which edition this alteration was first made; but I must leave this task to him who does not lack the means for it. To my misfortune I have no other edition at hand than one of the most recent, if it be not the very most recent—namely that of 1664, in Basel by Emanuel König. And even of this I cannot even say after which older edition it was printed; I presume, however, after that which Cardano without doubt revised for the second time in the year 1560, because I find both the second dedication to the Duke of Sessa and the *Actionem primam in Calumniatorem* [First Proceeding against a Slanderer] included. Be that as it may, I will do as much as I can and note the alterations which Cardano, judging by my edition, made in this entire passage.

One is much mistaken if one believes that he struck out nothing save the words *Igitur his* etc., and replaced them with others less offensive, if God wills. I note particularly three passages which are found in the original edition and have been omitted in the corrected ones: The first is that which is found above, where instead of the words: "And how absurd" down to "swears by his servants," Cardano found it good to put the following: *Absurda nonne sunt, quod fingant Deum ascendere ad coelum e terris, et quod ipse etiam per Daemones servos suos juret* [And how absurd is it that they pretend God ascends to heaven from earth, and that He Himself swears by the demons His servants]? One sees, therefore, that he was sincere enough to omit the absurd charge which he there makes against the Koran, as though it taught that God and the angels prayed for Muhammad. But I could wish that he had been even more sincere and omitted the rest as well. For what does he mean by it? How can he charge the Koran with something whereof Holy Scripture itself is not free? Is not God's ascending and descending spoken of times without number in the latter as well? And if it is not said therein that God swears by heaven and earth, He nevertheless swears by His soul—an expression that without doubt also stands in need of explanation.

The second passage is the whole first argument of the Muhammadans, which is drawn from the unity of God, the denial whereof they charge upon the Christians. All this he melted down into few words as follows: *At Mahumetani et ipsi*

munimenta habent. Primum quod Christiani non eam quam ipsi in Deo simplicitatem colant, et quod Christicolae imagines venerentur videanturque Deorum, non Dei unius cultores [But the Muhammadans also have arguments of their own: first, that Christians do not cultivate the same simplicity in God as they, and that worshippers of Christ venerate images and appear as worshippers of gods, not of one God].

The third passage, finally, is that where Cardano speaks of the saints of the Muhammadans, of which I see not the slightest trace in my edition.

Of these three alterations one can give a reason without much trouble; but what I am to say of the fourth, which I will cite directly, I know not. I find, namely, that he omitted also those words which are so excellent for the vindication of his good disposition, namely: *Sed utinam tam facile esset, arma illorum superare quam haec objecta diluere. Verum res ad arma traducta est, quibus plerumque major pars vincit meliorem* [But would to God that one could as easily overcome their arms as one can bring to naught these objections! However, the matter has come to arms, wherein the stronger party frequently overcomes the better]. He breaks off where I broke off above, and puts instead of the notorious transition nothing but the bare words: *Sed haec parum philosophos attinent, pro quibus institutus est sermo: ad provinciarum miracula transeamus* [But these things little concern the philosophers, for whom this discourse is intended: let us proceed to the wonders of the provinces, etc.]

I call these words bare, hopefully with right, and who knows whether I should not give them a harsher epithet. Good Cardano fared like a hundred other scholars who understood correcting as little as he. Does he not manifestly substitute for something offensive something even more offensive? What prevents translating his *haec parum philosophos attinent*: "What has a philosopher to concern himself with religions? What does the superstitious stuff matter to him?" I well know his meaning is not so bad, and he wishes to say nothing further than: "This concerns those philosophers for whom I write here—the natural scientists, namely—less." He does not mean philosophers in general, therefore, for whom religions are indeed a very worthy object. But do people accept reasons when they wish to distort?

I will add only a few words concerning the order in which the various editions of the books *De subtilitate* followed one another, and then close with a remark that

may perhaps be of some use. The first edition is beyond all dispute the one cited above of 1550, in Nuremberg. Herr Freytag holds an edition of Basel, without year, in folio, for the second; for the third that of 1554, likewise in Basel, by Ludovicus Lucius; and for the fourth that of 1560, which appeared in 8vo at the same place. Upon this sequence he will allow me to make a few observations:

I. Cardano says explicitly himself, in his *Actio prima* on p. 728, that the second edition of his book appeared in 1554, and that in the beginning of the year. De la Monnoye, whom Herr Freytag censures, might therefore well be right when he asserts that the offensive words were corrected in the same. Yet I must also say to Herr Freytag's excuse that Cardano, when he calls the edition of 1554 the second, without doubt did not mean to say that the first was never reprinted; he calls it the second because all the preceding ones, as printed from a single original edition, are to be regarded as only one with respect to the unaltered content.

II. But because many corrections are mentioned on the Basel folio edition without year, and because one finds even the *Actio prima* named on the title-page, Herr Freytag errs very greatly if he wishes to hold it for the second. How is that possible? Has this bibliophile forgotten that Scaliger's *Exercitationes* did not appear until 1557, and that the *Actio prima*, which is to be an answer to them, must therefore be of even later date?

III. Why the edition of 1554 cannot be the third, according to Herr Freytag's way of reckoning, is for this reason: because Cardano himself on p. 791 of the *Actio prima* speaks of a *prima et secunda Norimbergensi* [first and second Nuremberg edition], likewise of a *Lugdunensi* and *Lutetiana* [Lyons and Paris edition]. Of the *Lugdunensi* I know for certain that it came to light in 1551 in octavo, because the author of the essay *De libris raris* in Part X of the *Observationes Hallenses* explicitly cites it. In general, I presume that one will hardly ever be able to help oneself out of these and many other difficulties occurring here, because the booksellers without doubt played a trick here after the learned manner and printed more than one title for one and the same edition.

I come finally to the remark with which I will close. This accusation of Cardano, which I have hopefully reduced to shame beyond contradiction, our men of letters received from the hands of the Catholics, especially an ardent Mersenne. I will advise them to examine thoroughly everything they borrow from these

coreligionists before making common cause with them. These gentlemen often have special reasons for attaching a stain to this or that author, which fall away with us. Cardano, for example, lets the multitude of gods in the disputed passage be defended in the very same manner as they are accustomed to defend the saints, such as he attributes to the Muhammadans as well. Should this perhaps have annoyed the Catholics far more than all the rest? But they were perhaps too clever not to seek another pretext.

I ask that this be considered.